

REVIEW

Living with the changing California coast. Edited by Gary Griggs, Kiki Patsch, and Lauret Savoy. 2005. University of California Press, Berkeley, CA. 540 pp. Hard cover \$60.00, ISBN 978-0-520-24445-0; Paperback \$24.95, ISBN 978-0-520-24447-4.

Living with the Changing California Coast, is a revised version of the book by the same title that originally was published in 1985. This version has been revised substantially and updated to include the latest data on human activity along the coast, as well as the latest theories on climate change and its influence on rising sea levels and shoreline processes. It contains 279 black and white photographs and 81 maps. Text material contributed by the editors is enhanced by an additional 15 contributors.

The first eight chapters of this volume deal with geologic evolution of the coastline, climate and weather, shoreline processes, and the implications of coastal hazards on land ownership. Chapter 3 is all about climate and weather. It is written in a manner that is fully understandable to non-meteorologists. The authors describe the types and sources of the storms that bring precipitation to California. Recent storm events are explained. El Niño is fully explained. A series of simple graphics helps to explain seasonal changes in the weather, tides, and the history of changing sea level. Chapter 4 describes shoreline processes such as erosion, the work of currents and waves, as well as the sources and losses of sand. Chapter 7 is about what humans have done to combat the forces of nature and the extent to which their attempts have been effective.

The remainder of the book is divided into twelve chapters that discuss the California coastline region by region from north to south. For example, Chapter 9 covers the region from

the Oregon border to Shelter Cove and Chapter 20 covers from Dana Point to the international border. Each of these regional chapters is further divided into descriptions of subregions and detailed maps, and include summaries of the characteristics, threats, and public policies relevant to each specific region. For example, if you were considering owning property on the coast near Pismo Beach you could refer to the specific map of the region in Chapter 16. You would be informed that the Shell Beach area has many homes on a narrow marine terrace that require protection by seawalls, bulkheads, rip rap, etc. and that seacliff retreat averages four to eight inches per year.

Essentially, this is a geology book. Botanists, however, do live near the coast and many of them are homeowners that are influenced by coastal processes. In fact, demographic data have told us that a full 80 percent of California residents live within an hour's drive of the coast, and the authors in their discussion of global warming point out that 60 percent of the world's population lives within 35 mi of a coastline and that 100 million people live within three vertical feet of sea level. Coastal plants are influenced by climate, weather, soil, and coastal processes. Do you want to know why the coastal dunes (and by extension their endemic plants) are located where they are? It's in this book. Whether you are a botanist or not, if you are interested in coastal natural history and the implications of living near the coast, you should own this book. Periodic online sales advertised by University of California Press offer this book at substantial discounts in hard cover or paperback.

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